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(54) Title: PROCESS FOR REMOVING CARBON DIOXIDE FROM GAS MIXTURES

(57) Abstract: The present invention relates to a process for removing carbon dioxide and optionally hydrogen sulphide and/or COS from a gas stream containing these compounds by washing the gas with an aqueous washing solution containing water, sulfolane and a secondary or tertiary amine derived from ethanolamine. More particularly the invention relates to the process described above, the process being carried out in the presence of a primary or secondary amine compound in an amount between 0.5 and 15 wt. % based on water, sulfolane and amine. The invention further relates to an absorbent liquid to be used in the above process.

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## INTERNATIONAL SEARCH REPORT

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A. CLASSIFICATION OF SUBJECT MATTER  
IPC 7 B01D53/14

According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 B01D

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, WPI Data, PAJ

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	WO 00 66249 A (UNION CARBIDE CHEMICALS & PLASTICS TECHNOLOGY CORPORATION) 9 November 2000 (2000-11-09)	1-4, 6-13, 15, 16
Y	page 1, line 5 -page 4, line 25; claims 1-7	14
Y	--- US 5 820 837 A (MARJANOVICH ET AL) 13 October 1998 (1998-10-13) column 3, line 65 -column 6, line 11	14
Y	--- US 6 102 987 A (GROSS ET AL) 15 August 2000 (2000-08-15) column 4, line 38 -column 5, line 52	14
A	--- US 4 336 233 A (APPL ET AL) 22 June 1982 (1982-06-22) cited in the application column 1, line 10 -column 3, line 44 --- -/-	1

☒ Further documents are listed in the continuation of box C.☒ Patent family members are listed in annex.

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## C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	<p>GB 2 017 524 A (SHELL INTERNATIONALE RESEARCH MAATSCHAPPIJ B. V.) 10 October 1979 (1979-10-10) examples 1,2</p> <p>-----</p>	1

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